

FIG. 1 PRIOR ART

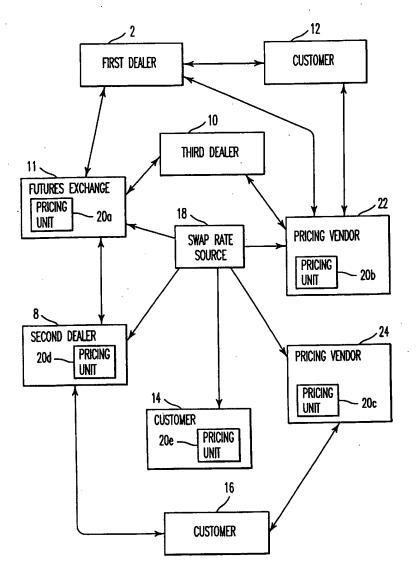


FIG.2

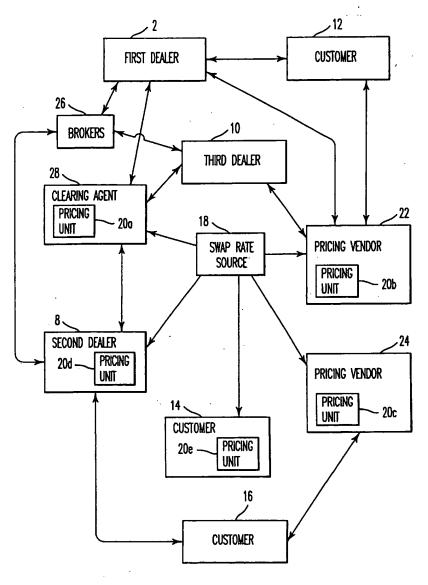
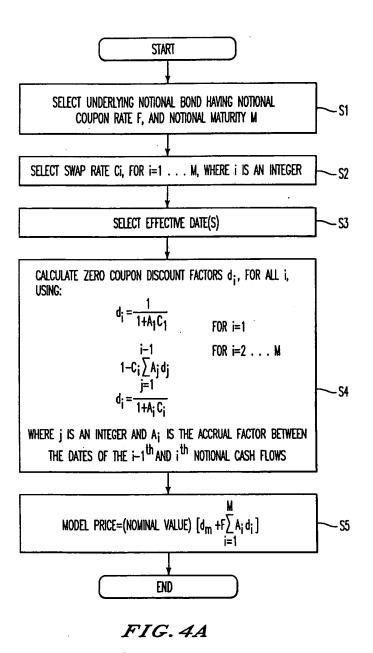
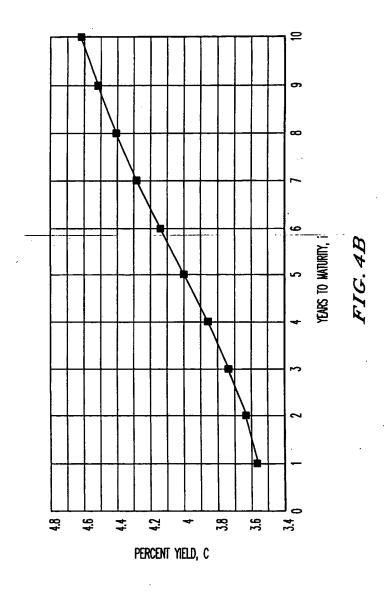


FIG. 3



Page 71 of 85



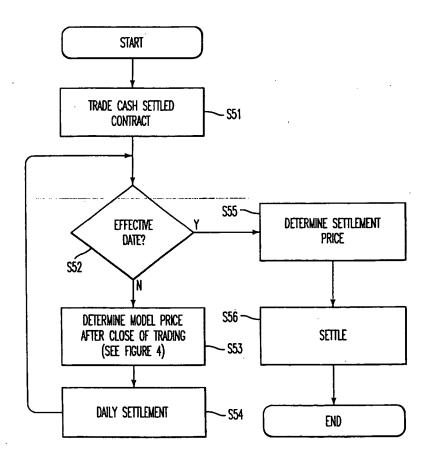
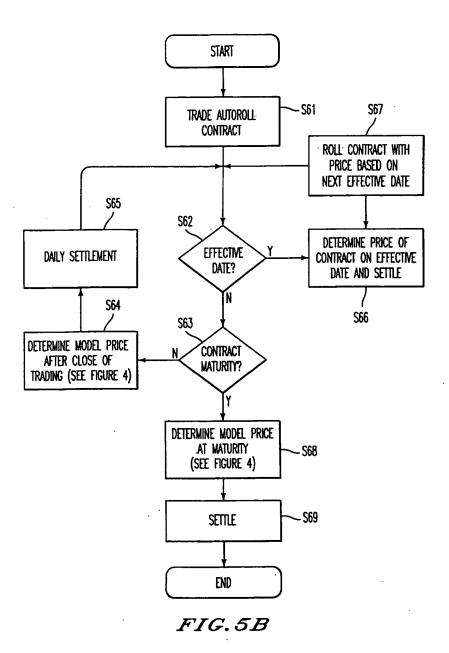
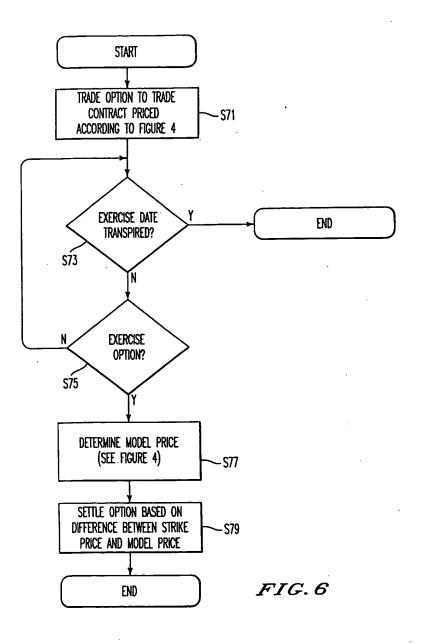
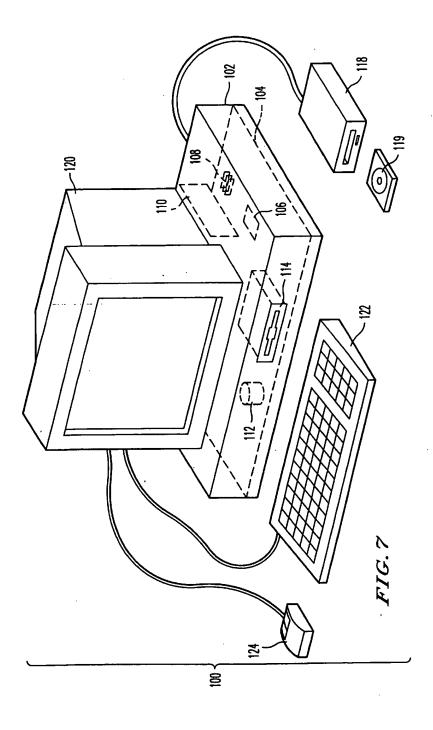


FIG. 5A







عد.	S		듇	16-Dec-98	111.03	-	17-Mar-99	110.49		<u> </u>	<u></u>				-	•						_			
ſ	OUTPUTS		Front Month	Effective Date	EDSP	Bock Month	1 T	Fair Value (as of Front Month	Lifective Unite	Calendar Koll	(price basis	(Cilling)													
H H				Cash Flows	9	16-Dec-98	10	16-Dec-08			ils	Remaining Maturity	9		9 3/4									-	
9		s Only)			Notional Coupon	Start Date	Initial Moturity	End Date			Delivery Month Details	Expiring Front Effective Date	16-Dec-98	ᄣ	17-Mar-99										
<u>.</u>		Alter Blue Figures in Green Background/DropDown Lists Only									Deliv	Expiring Front	Dec-98	Back Month	- 14 - 39										
	SEGN.	Green Backgr					_	•		Rate		3.457	3.469	3.469	2.5		3.570	7.628	2.73	38.5	30.4	4.276	4.409	4.522	4.04
J		Figures in		Oy)						Term	Months	_	٠٠٠ (۔	2	LEGIZ.	,	7 -	~ ·	+ ·	۰ «	~	· œ	တင္	2
		(After Blue	1	Last Trading Day	360	2	360	14-Dec-98		Source		TIBOS.	8	25 E	ARG.		图	医	원 원	조 돌	달 1 달 2	5 K	是	る	155 mgt
Ą	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			Swap Rates (taken on	ı ə	Swap Settlement Delay (Dms)	Libor Daycount	8 Last Trading Day		ed/ ₁		Zero Coupon	Zero Coupon	Zero Coupon	Zero Coupon		Fixed Income	Fxed	Tee.	<u>ş</u>	是 图:			<u>F</u>	
L	E	-	,	-	5	ع		∞	တ	2	=	12	::	7	2	16	11	8 2	<u> </u>	ଥ	7	7	3 2	াহ	92

FIG. 8

ſ	Zero Coupon Discount Factor (term from Front Month Effective Date)	1.00000	0.996841	0.991403	0.982766	0.973827	0.965531	0.9310060	0.8957207	0.8590481	0.8210922	0.7824880	0.7434964	0.7042934	0.6666523	0.6303087	15/
-							0.965531	0.936178	0.893233	0.856662	0.821092	0.782488	0.743496	0.708206	0.664801	0.628558	
=	Accrual Factor;		0.091666667	0.25	0.50555556	0.761111111	1.000	1.006	0.997	0.997	1.000	1.000	1.000	1.006	0.997	0.997	
9	Day of Following Maturity	Wednesday	Monday	Tuesday	Wednesday	Thursday	Thursday	Monday	Monday	Monday	Tuesday	Thursday	Friday	Monday	Monday	Tuesday	
L.	Following Maturity	16-Dec-98	18-Jan-99	16-Mar-99	16-Jun-99	16-Sep-99	16-Dec-99	18-Dec-00	17-Dec-01	16-Dec-02	16-Dec-03	16-Dec-04	16-Dec-05	18-Dec-06	17-Dec-07	· 16-Dec-08	6.5
w	Rate		3.457	3.469	3.469	3.531	3.570	3.628	3.731	3.860	4.000	4.139	4.276	4.409	4.522	4.621	FIG. 9
O	Day	Wednesday	Saturday	Tuesday	Wednesday	Thursday	Thursday	Saturday	Sunday	Monday	Tuesday	Thursday	Friday	Saturday	Sunday	Tuesday	
23	Maturity of par swap	16-Dec-98	16-Jan-99	16-Mar-99	16-Jun-99	16-Sep-99	16-Dec-99	16-Dec-00	16-Dec-01	16-Dec-02	16-Dec-03	16-Dec-04	16-Dec-05	16-Dec-06	16-Dec-07	16-Dec-08	
8	Tem	Year(s)	1/12	1/4	1/2	3/4	. —	. 7	23	4	ĸ	9	7	&	ග	9	
V	Source		BBA LIBOR	BBA UBOR	BBA LIBOR	BBA LIBOR	RS mit	RS mit	ES THE	RS mit	图	RS mit	RS met	器	RS mit	132 134 134	
	-	2	3	4	5	9	7	∞	6	2	=	12	13	4	5	92	

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L		Adjusted Cash Flow			9	6.03333333	5.98333333	5.98333333	9	ဖ	9	6.03333333	5.98333333	105.983333
ш		Notional Cash Flow			9	ဖ	ထ	9	ဖ	9	9	9	9	106
٥		Accrual Factor (30E/360)			1000	1.006	0.997	0.997	1.000	1.000	1,000	1.006	0.997	0.997
Ċ		Following Cash Flow Dates		16-Dec-98	16-Dec-99	18-Dec-00	17-Dec-01	16-Dec-02	16-Dec-03	16-Dec-04	16-Dec-05	18-Dec-06	17-Dec-07	16-Dec-08
В		Notional Cash Flow (CF) Dates		16-Dec-98	16-Dec-99	16-Dec-00	16-Dec-01	16-Dec-02	16-Dec-03	16-Dec-04	16-Dec-05	16-Dec-06	16-Dec-07	16-Dec-08
V		Cash flow (in years from Start day)		Start Date	_	2	м	*	2	9	_	∞	0	10
	7		62	-	2	9	_	∞	6	2	=	12	23	14

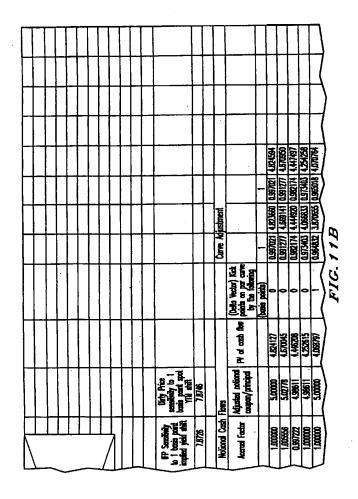
FIG. 104

	 	_	_	_			_					_	_	_	_			
_	Al of Back	Month	Effective	Date	1.516666667	0	0	0	0	0	0	0	0	0			_	32
×	A of Front	Month	Effective	Date	0	0	0	0	0	0	0	0	0	0				
7	PV (Bock Effective	Date) of Cash	Flows After Back	Month		5.843974503	5.666316647	5.40638369	5.185035383	4.969746138	4.736090047	4.500089866	4.28649157	4.023774456	67.3878994			
_	PV (Front Effective	Date) of Cash	Flows After front	Month		5.793183354	5.617069558	5.35939573	5.139971205	4.926553083	4.694927743	4.460978687	4.249236816	3.988803133	66.80221772			FIG. 10B
=	PV (Front	Effective Date)	of Adj Cash	Plows		5.793	5.617	5.359	5.140	4.927	4.695	4.461	4.249	3.989	66.802			E.
ပ	Discount Factor	(From Front	Effective Date)	•		0.966	0.931	0.896	0.859	0.821	0.782	0.743	0.704	0.667	0.630			
										_		_		_	_	J		

FIG.11A	FIG.11B
FIG.11C	FIG.11D

FIG. 11

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		\				/	/		down box only			Delta Vector	(Change in IFP)	•	8.0161			Following	notional cashillow notional cashillow date	12/16/98	12/16/99	12/18/00	12/17/01	12/16/02	12/16/03	
		\	\	/	/	/			IPF) Calculator-after blue figures/drop-down box only				Implied spot YTIM		4.801%			Number of	notional cashillow	0	_	2	c	1	2	
			\ /	\langle					F) Calculator-alter		Outputs	Implied YTM/par	rate smap rate	at Expiry	4.801%			Par swap	sensitivity						0.9649	
			/				******		Implied Futures Price (IP		-	Implied Financing	rate		3.46%	•		Zero! Coupon	discount factors	1.00000	0.997021	0.991277	0.982174	0.973403	0.964925	114
	/					\	\		baildml			Implied Futures	Pice (FP)	•	101.56			Avenul Factor			0.086111	0.250000	0.505556	0.761111	1.000000	FIG. 11A
-	-							<u> </u>				Dirty Price (present	value) as of	trade date	101.54		Discount Factors	Nominal term DM Swap/Libor Following Maturity	of depo/par swap	12/15/98	1/15/99	3/15/99	6/12/38	9/12/99	12/15/99	
																	Rates to	DIM Swap/Libor	Rate		3.470	3.520	3.590	3.590	3,635	
	12/11/98	_	12/15/98	12/16/98	12/14/98		9	9		2				·				Nominal term	(keans)	0	0.08333	0.25	0.5	0.75)
	Today	Swap/Libor Delay (days)	Swap/Libor Settle	Delivery Day	Last Trading Day		Notional Coupon	LPB Moturity		Interpolation								J	ao moc		- Figure	- Par	Libor	Libor	IRS market	



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12/16/04	12/16/05	12/18/06	12/17/07	12/16/08																					
9	7	8	o	0																					
$\langle \ \ $		3.6413	4.4529	5.2276	5.9628	6.6592	7,3223	7.9376	8.5242	9.0798	9.6054	10.1044	10.5714												
0.929161	0.891719	0.852892	0.813869	0.774691	0.735250	0.696342	0.659511	0.618678	0.586643	0.555597	0.525534	0.496314	0.468259												
1.000000	1.005556	0.997222	0.997222	1.000000	0000001	1.000000	955500'1	111166'0	0000001	1.00000	1.00000	1.005556	0.997222												
12/15/00	12/17/01	12/16/02	12/15/03	12/15/04	12/15/05	12/15/06	12/17/07	12/15/08	12/15/09	12/15/10	12/15/11	12/11/12	12/16/13			•									
3.740	3.880	4.040	4.180	4.310	4.440	4.560	4.650	4.804	4.849	4.894	4.940	4.985	5.030												
2	3	. 4	5	9	7	∞	6	2	=	15	13	1	15												
IRS market	IRS market	IRS market	PC market	IRS market	Linear Interpolation	Linear Interpolation	Linear Interpolation	Linear Interpolatio	IRS market																

FIG. 110

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	3.875150	3.678189	3.502219	3.291276	65.006742																						*
	0.928982 3.870655 0.929340 3.875150	0.891977	0.852563 3.496776 0.853222 3.502219	0.813476 3.285515 0.814262 3.291276	0.774242 [64.879642] 0.775141 [65.006742	0.735749	0.696883	0.660089	0.619284	0.587275	0.556250	0.526204	0.496998	0.468952													
	3.870655	0.891460 3.673211 0.891977	3.496776	3.285515	64.879642																						0
	0.928982	0.891460	0.852563	0.813476	0.774242	0.734752	0.695801	0.658933	0.618073	0.586012	0.554944	0.524864	0.495632	0.467567													FIG. 11D
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	302	704	496	394	3158								-														
	3.872902	3.675704	3.499496	3.288394	64.943158											L						L		L	_		
	5,0000	5.00000	12778	4.98611	104.98611																						
1	2	35	25	4	Ş	_	L	_								·	L	_	_				L				
	000001	1.00000	1.005556	0.997222	0.997222																-						
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